


COMPLETE LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (original) A material useful as a substrate for preparing articles, comprising:
a compressed sheet of graphite having graphite intercalation compound included therein.

 Claim 2 (amended) A material of claim 1 wherein the ~~intercalant comprises a material~~ intercalation compounds are selected from the group consisting of halogens, mixed halogens, halides, oxidizing acids, alkali metals, transition metals and mixtures.

Claim 3 (original) A material of claim 1 which comprises at least 1% of one or more graphite intercalation compounds.

Claim 4 (original) A material of claim 1 which comprises from 3 to 20% by weight of a graphite intercalation compound.

Claim 5 (original) A material comprising at least one layer of a material of claim 1 and another layer of flexible graphite sheet.

Claim 6 (original) A material of claim 1 which has a density of from about 0.1 to about 1.5 grams/cm³.

Claim 7 (original) A material of claim 1 which has a thickness of from 0.075 to 1.4 mm.

Claim 8 (original) A material of claim 1 which has an electrical conductivity within the range of from 1.0 to $7.6 \times 10^7 \Omega^{-1}\text{m}^{-1}$.


Claim 9 (original) A material of claim 1 which has a thermal conductivity within the range of 5 to 2000 W/m K.

Claim 10 (amended) A material of claim 1 which has an electrical ~~conductivity~~resistivity of less than about 8 μ ohm-meter.

Claim 11 (original) A material of claim 1 wherein the sheet contains resin at a level of at least about 5% in the flexible graphite sheet.

Claim 12 (amended) A process for preparing a material useful as a substrate for preparing articles ~~such as an embossed or unembossed flexible graphite sheet~~ comprising:

intercalating a sheet of ~~flexible~~compressed particles of exfoliated graphite to an extent
~~necessary~~ to form graphite intercalation compounds which increase the thermal
and/or electrical conductivity of the graphite sheet; and compressing the sheet
following intercalation.



Claim 13 (amended) A process of claim 12 wherein the ~~intercalant comprises a~~
~~material~~intercalation compounds comprised are selected from the group consisting of
halogens, mixed halogens, halides, oxidizing acids, alkali metals, transition metals
and mixtures.

Claim 14 (original) A process of claim 12 wherein the sheet following intercalation
comprises at least 1% of one of more graphite intercalation compounds.

Claim 15 (original) A process of claim 12 wherein the sheet following intercalation
comprises from 3 to 20% by weight of a graphite intercalation compound.

Claim 16 (amended) A process of claim 12 wherein at least one layer of a ~~material of~~
~~claim 1~~compressed sheet of graphite having graphite intercalation compounds
included therein is compressed with another layer of flexible graphite sheet.

Claim 17 (amended) A process of claim 12 wherein the ~~final~~compressed sheet has a
density of from about 0.1 to about 1.5 grams/cm³.

Claim 18 (amended) A process of claim 12 wherein the ~~final~~compressed sheet has a thickness of from 0.075 to 1.4 mm.

Claim 19 (amended) A material of claim 12 wherein the ~~final~~compressed sheet has an electrical conductivity within the range of from 1.0 to $7.6 \times 10^7 \Omega^{-1} \text{ m}^{-1}$.

Claim 20 (amended) A process of claim 12 wherein the ~~final~~compressed sheet has a thermal conductivity within the range of 5 to 2000 W/m K.

Claim 21 (original) A process of claim 12 wherein the sheet contains resin at a level of at least about 5% in the flexible graphite sheet.

Claim 22 (amended) A material of claim 12 wherein the ~~final~~compressed sheet has an electrical resistivity of less than about 8 μ ohm-meter.
